

FALL-RELATED TRAUMATIC BRAIN INJURY

Facts about fall-related Traumatic Brain Injury (TBI) in Utah:

- Fall-related TBI was a leading cause of injury death among Utahns ages 60 and older.¹
- Ninety-two percent of fall-related TBI patients required hospitalization and eight percent died.¹
- An average hospital stay for a fall-related TBI was four days at an average charge of \$36,803.¹

What is TBI?

Includes one or more of the following:

- Observed or self-reported unconsciousness or decreased level of consciousness;
- Amnesia;
- Skull fracture;
- Changes in motor function, sensory function, reflexes, speech;
- Seizures; or
- Hemorrhages, bruising or other trauma of the brain.

2005 Utah Traumatic Brain Injury Data

WHO

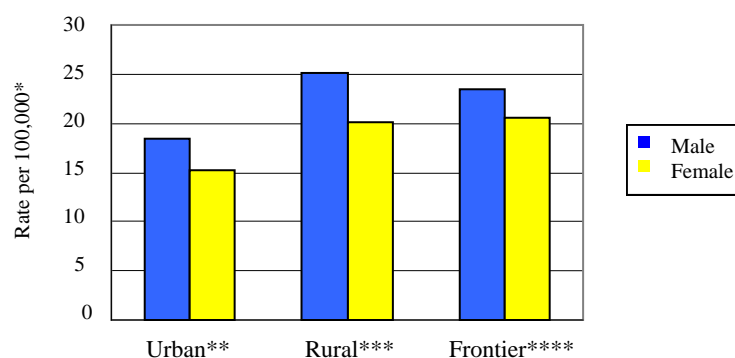
- Falls were the leading cause (46.3 per 100,000 population) of TBIs suffered by Utahns in 2005.¹
- Females over age 70 had the highest rates (272 per 100,000 population) of fall-related TBIs.¹
- Males ages 60-69 had the second highest rates (77 per 100,000 population) of fall-related TBIs.¹
- Males over age 70 had the third highest rate (67.9 per 100,000 population) of fall-related TBIs.¹

HOW

- Fall-related TBIs occurred most often on the same level.¹
- Falls from a high level such as a roof, building or other structure was the second most common occurrence.¹

WHERE

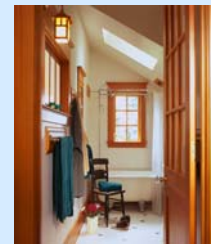
Fall-related TBIs by Sex and Geographic Location



FALL PREVENTION

Home

- Remove things you can easily trip over from stairs and walkways.
- Remove small throw rugs.
- Use a sturdy step stool to reach overhead items.
- Install grab bars next to the toilet and in the tub and shower.
- Use non-slip mats or other surfacing in the tub and shower.
- Use brighter lamps to help you see better around the house.
- Put sturdy handrails in stairways.



Health

- Get your vision checked annually.
- Have your doctor check your medicines for dangerous interactions that could lead to falls.
- With doctor approval, exercise to strengthen bones and muscles.
- If your doctor recommends it, use a cane or walker.

HOW MUCH

- In 2005, hospital and emergency department (ED) charges for fall-related TBIs were \$19 million accounting for 30% of the TBI medical charges.¹
- Falls was the second highest charge for TBI hospital and ED charges, following motor vehicle-related TBIs at \$26 million or 41% of the TBI medical charges.¹

Note

- * Rates are geographically adjusted to represent all fall-related TBIs.
- ** Urban is defined as 100 or more persons per square mile
- *** Rural is more than 6 but less than 100 persons per square mile
- **** Frontier is fewer than 6 persons per square mile

SENIOR FALL-RELATED TBI PREVENTION TIPS²

DID YOU KNOW ...

As adults age, they spend more of their time at home. As such, one-half to two-thirds of all older adult falls happen in or around the home. The majority of home falls occur on the same level; for example, tripping or slipping. Many seniors can also suffer serious injuries by slipping in a tub or shower, or when falling from a bed or toilet. Physical changes that occur as people age also put seniors at risk of fall injury. Even a senior's choice of footwear can play a role in falls. Wearing high heels, slippers, and socks without shoes all increase the risk of falling.



Focusing on the following three recommendations are critical, as seniors are living longer than ever before.

Recommendation 1.

Seniors should work with family members and health care providers to assess their medical risks for falling, including:

- Have an annual physical exam
- Have an annual eye exam
- Review medications for possible side effects and interactions
- Be screened for osteoporosis
- If recommended by a doctor, take medications to strengthen bones
- If recommended by a doctor, begin a strengthening/exercise program.

Recommendation 2.

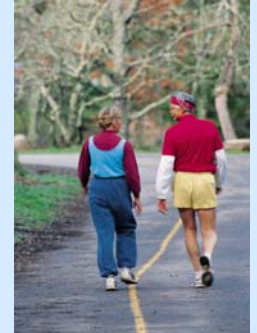
All seniors and those who care for them should check the home for the following hazards and correct problems as necessary.

- Unstable furniture
- Loose throw rugs
- Slippery bathroom surfaces
- Loose or missing stair railings
- Poor lighting
- Clutter
- Electrical cords in walkways
- Lack of grab bars near toilets and in tubs/showers

Recommendation 3.

Seniors should be very selective when choosing footwear.

- Flat shoes with sturdy, non-slip soles and good ankle support are best
- Slippers are too unstable and should not be worn
- Wearing socks without shoes is dangerous, especially on wood, tile, or other smooth surfaces
- Avoid shoes with heels
- Replace old or poorly-fitting shoes



References

¹ Utah Department of Health, Violence & Injury Prevention Program, TBI database

² Utah Department of Health, Violence & Injury Prevention Program, *Falls Among Seniors: 1999-2004 Prevalence, Impact and Prevention*, <http://www.health.utah.gov/vipp/>